

AQA GCSE Chemistry Required Practicals – Integrated Instructions – v0.1 – 09/07/18

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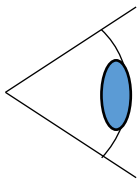
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3 1.8-2.0g copper oxide. Add half and swirl, **wait 1 minute**, add the other half. ☐

2 15cm³ sulfuric acid
– **wait 2 minutes** ☐

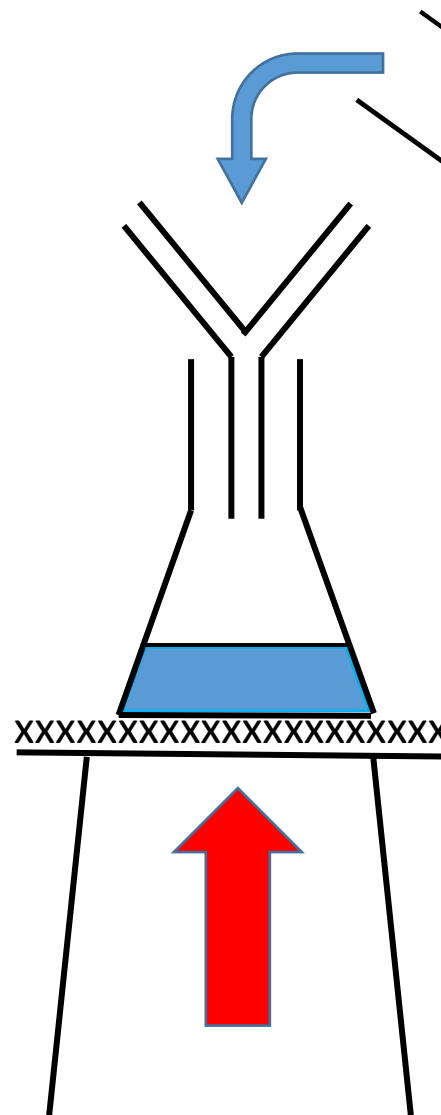
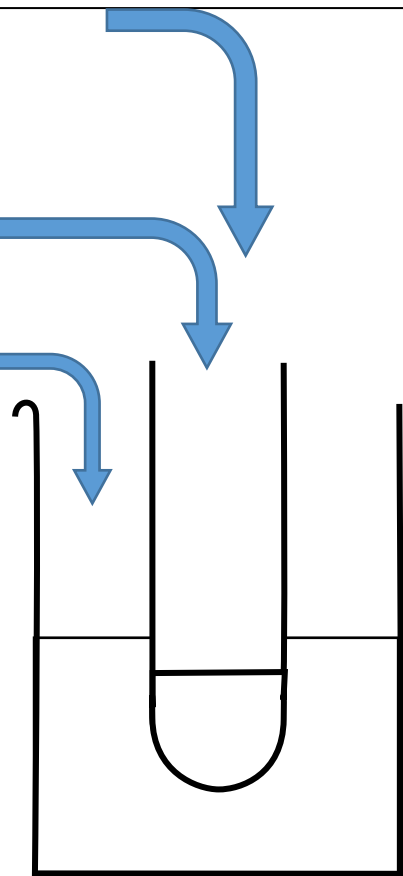
1 Half fill with just
boiled water ☐



GCSE Chemistry: Making salts

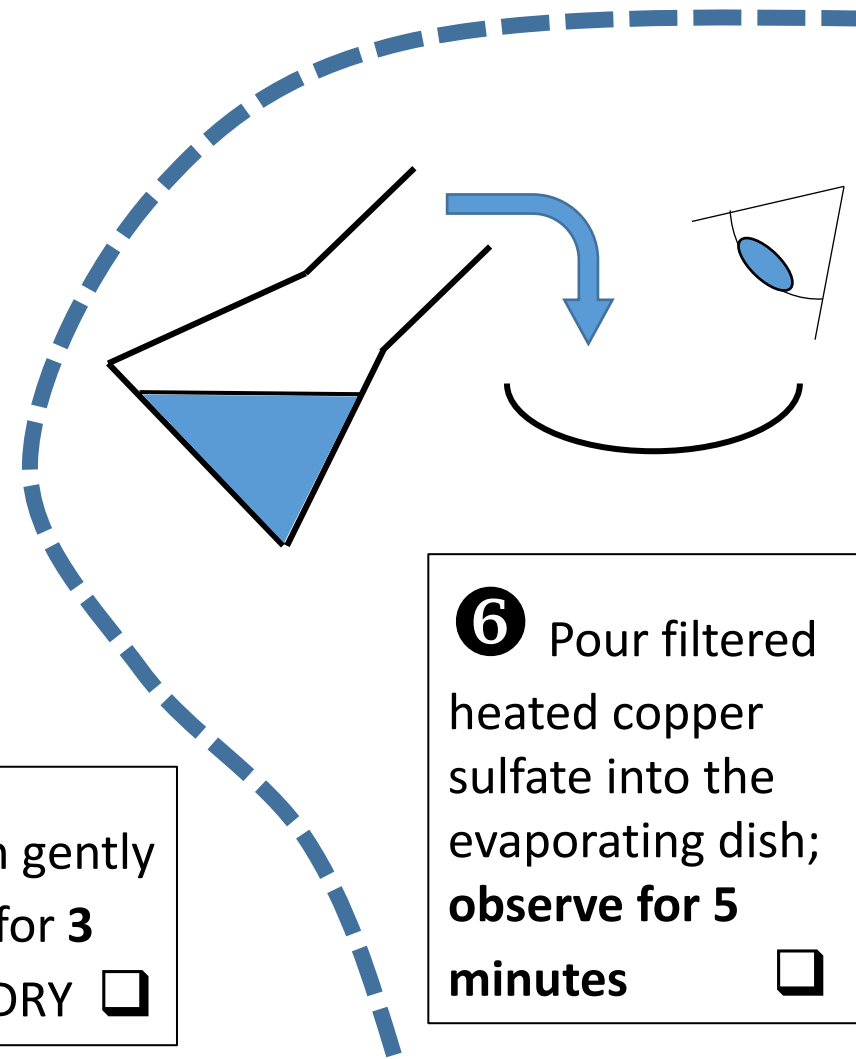
Designed in line with practicals in AQA GCSE Chemistry / Combined Science Handbooks

<http://www.aqa.org.uk/resources/science/gcse/teach/practicals> using
<http://science.cleapss.org.uk/Resource/PP027-Making-copper-sulfate-crystals.pdf>



5 Remove funnel, then gently heat solution (half-blue) for **3 minutes** – DO NOT BOIL DRY ☐

4 Filter copper sulfate solution (max 3 min) ☐



6 Pour filtered heated copper sulfate into the evaporating dish; **observe for 5 minutes** ☐

1 25.0 cm³
NaOH (pipette)

2 5-10 drops of
indicator



GCSE Chemistry: Neutralisation

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AQA GCSE Chemistry / Combined
Science Handbooks

[http://www.aqa.org.uk/resources/
science/gcse/teach/practicals](http://www.aqa.org.uk/resources/science/gcse/teach/practicals)

4 Fill to 0.0 cm³
with H₂SO₄

3 Tap is
closed

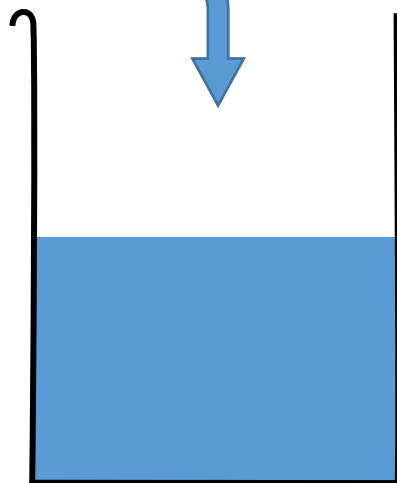
7 Measure and
record volume

5 Add H₂SO₄
and

6 ... swirl
until colour
change



1 50.0 cm³
electrolyte
solution



3 Electrodes



2 Petri dish lid



4 Power pack 4V
5 minutes



7 Damp blue
litmus paper gas
test



6 Observe
negative electrode
and record



5 Observe
positive electrode
and record



GCSE Chemistry: Neutralisation
Designed in line with practicals in
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Science Handbooks

[http://www.aqa.org.uk/resources/
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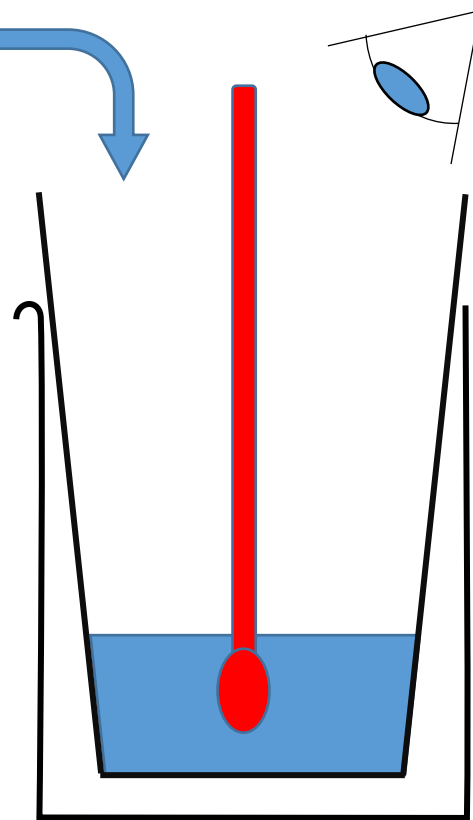
2 Stir until temperature stops changing – record temperature

1 30 cm³ acid (measuring cylinder)

3 5cm³ alkali

4 Repeat Step **2**

5 Repeat until a total of 40cm³ alkali is added



GCSE Chemistry: Temperature

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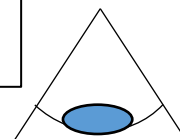
GCSE Chemistry: Rates of reaction 1

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<http://www.aqa.org.uk/resources/science/gcse/teach/practicals>

4

Swirl flask
Place on cross
Start timer



5

Stop timer when
cross has disappeared
– record time



3

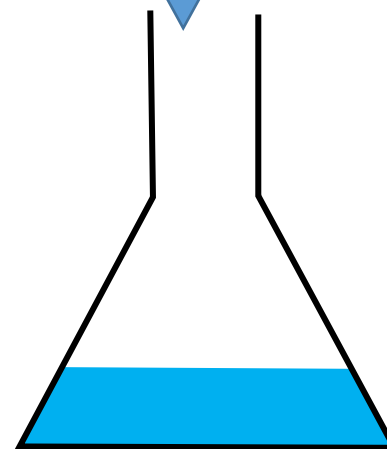
Add 10cm³ ☐ ☐ ☐
10cm³ ☐ ☐ ☐
10cm³ ☐ ☐ ☐
10cm³ ☐ ☐ ☐
10cm³ ☐ ☐ ☐
acid (measuring cylinder)

2

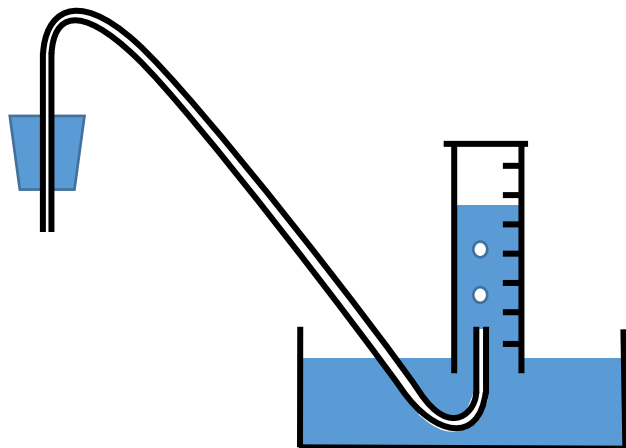
Add 40cm³ ☐ ☐ ☐
30cm³ ☐ ☐ ☐
20cm³ ☐ ☐ ☐
10cm³ ☐ ☐ ☐
no cm³ ☐ ☐ ☐
water (measuring
cylinder)

1

Add 10cm³ ☐ ☐ ☐
20cm³ ☐ ☐ ☐
30cm³ ☐ ☐ ☐
40cm³ ☐ ☐ ☐
50cm³ ☐ ☐ ☐
sodium thiosulfate
(measuring cylinder)



1 Set up gas collection apparatus ☐



2 50cm³ 2.0M acid ☐

3 3cm magnesium ribbon ☐

GCSE Chemistry: Rates of reaction 2

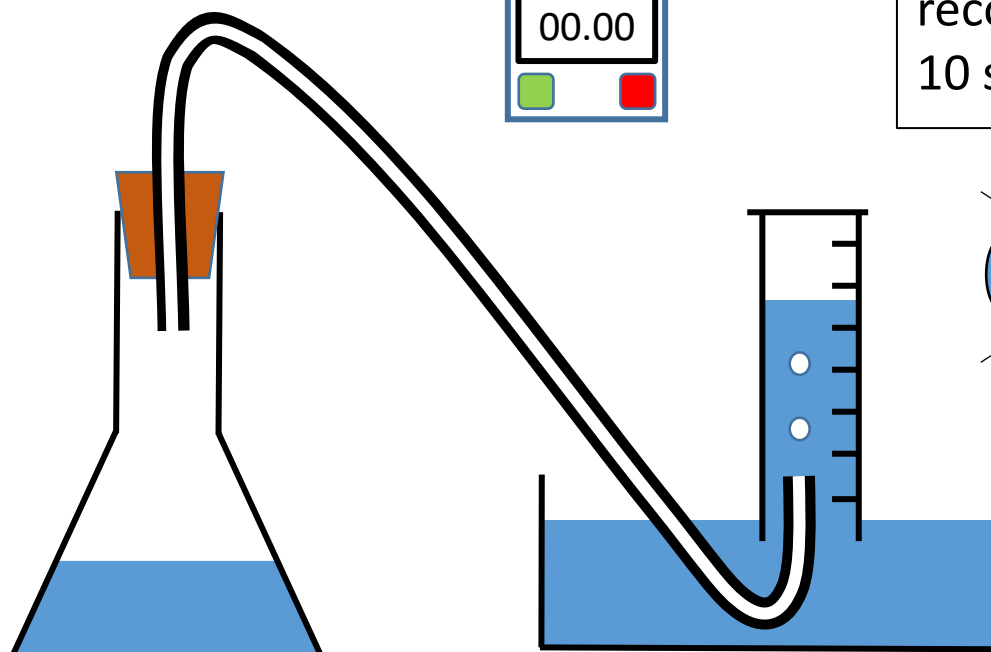
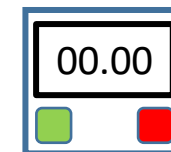
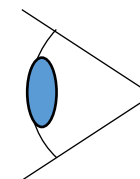
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<http://www.aqa.org.uk/resources/science/gcse/teach/practicals>

4 QUICKLY place bung into conical flask AND start the timer ☐



5 Measure and record volume every 10 s, for 100 s.



3 Label the spots ☐

2 Spot each food colouring in turn:

A ☐ B ☐ C ☐
D ☐ U ☐

1 Draw base line in pencil ☐



GCSE Chemistry: Chromatography

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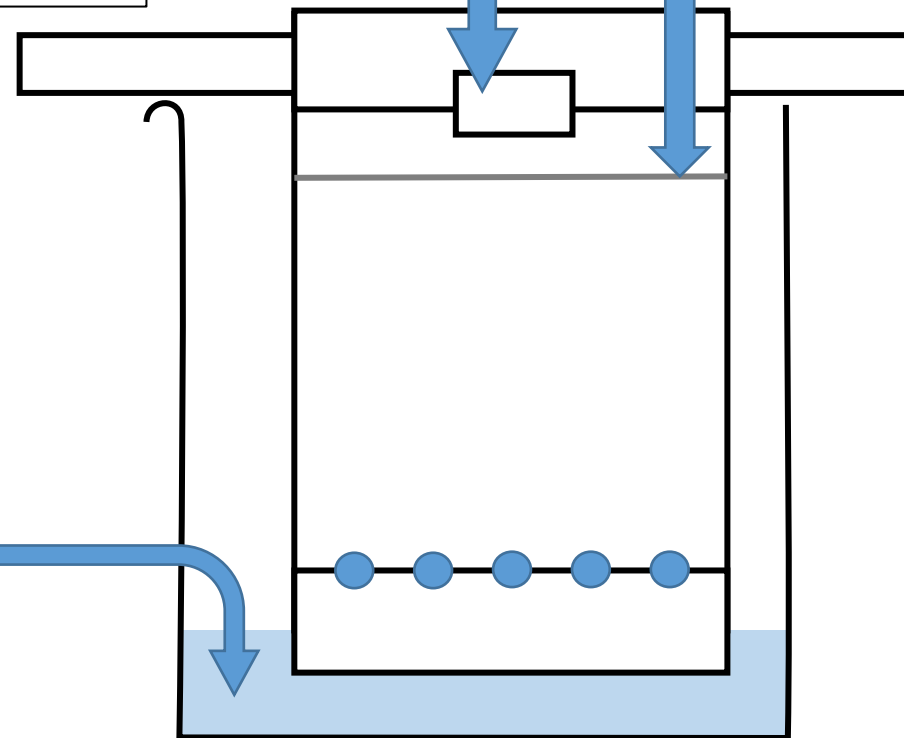
A B C D U

6 Place chromatogram in beaker ☐

5 Roll paper round glass rod and tape ☐

4 Add water into beaker ☐

7 Remove chromatogram and draw the solvent front in pencil ☐

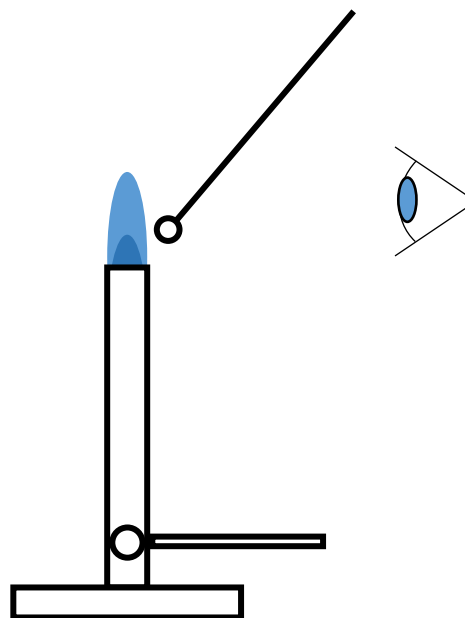




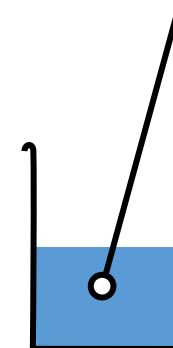
1 Dip loop
in metal
chloride
solution



2 Flame
loop and
observe
colour



3 Clean
the loop



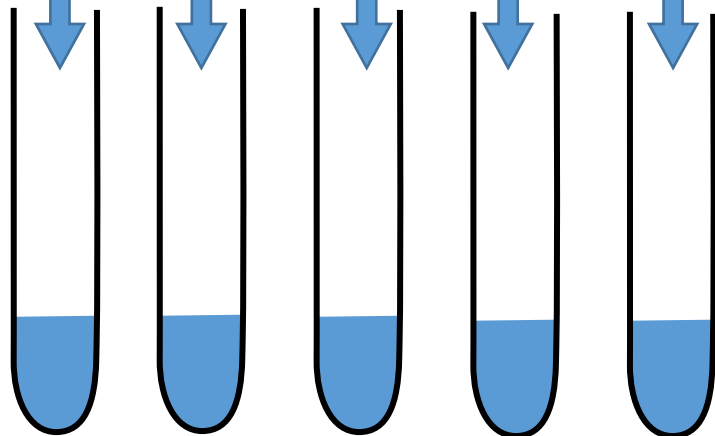
GCSE Chemistry: Identifying ions 1

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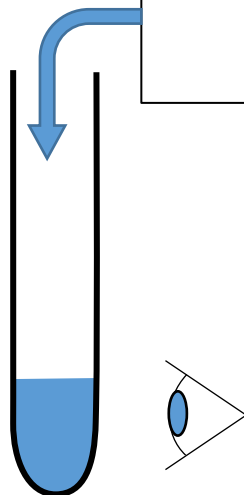
[http://www.aqa.org.uk/resources/
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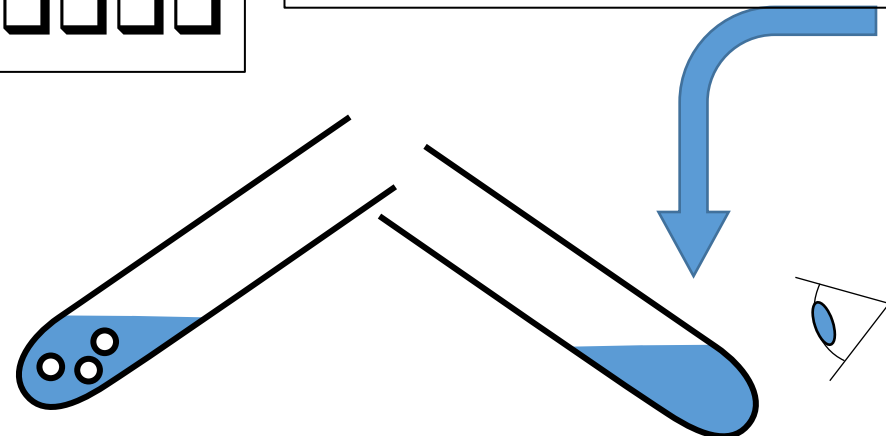
1 Separately 1cm³ each sodium salt solution ☐ ☐ ☐



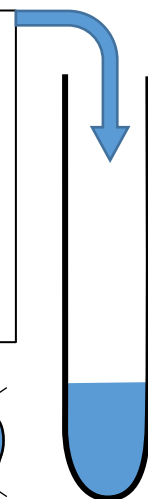
2 CARBONATE TEST:
Add 1cm³ HCl ☐ ☐ ☐ ☐ ☐



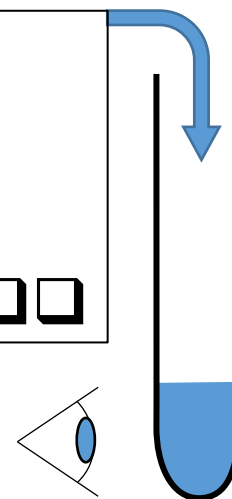
3 CARBONATE TEST: If bubbles, limewater test ☐



4 SULFATE TEST:
• 3 drops nitric acid
• 1 cm³ barium chloride ☐ ☐ ☐ ☐ ☐



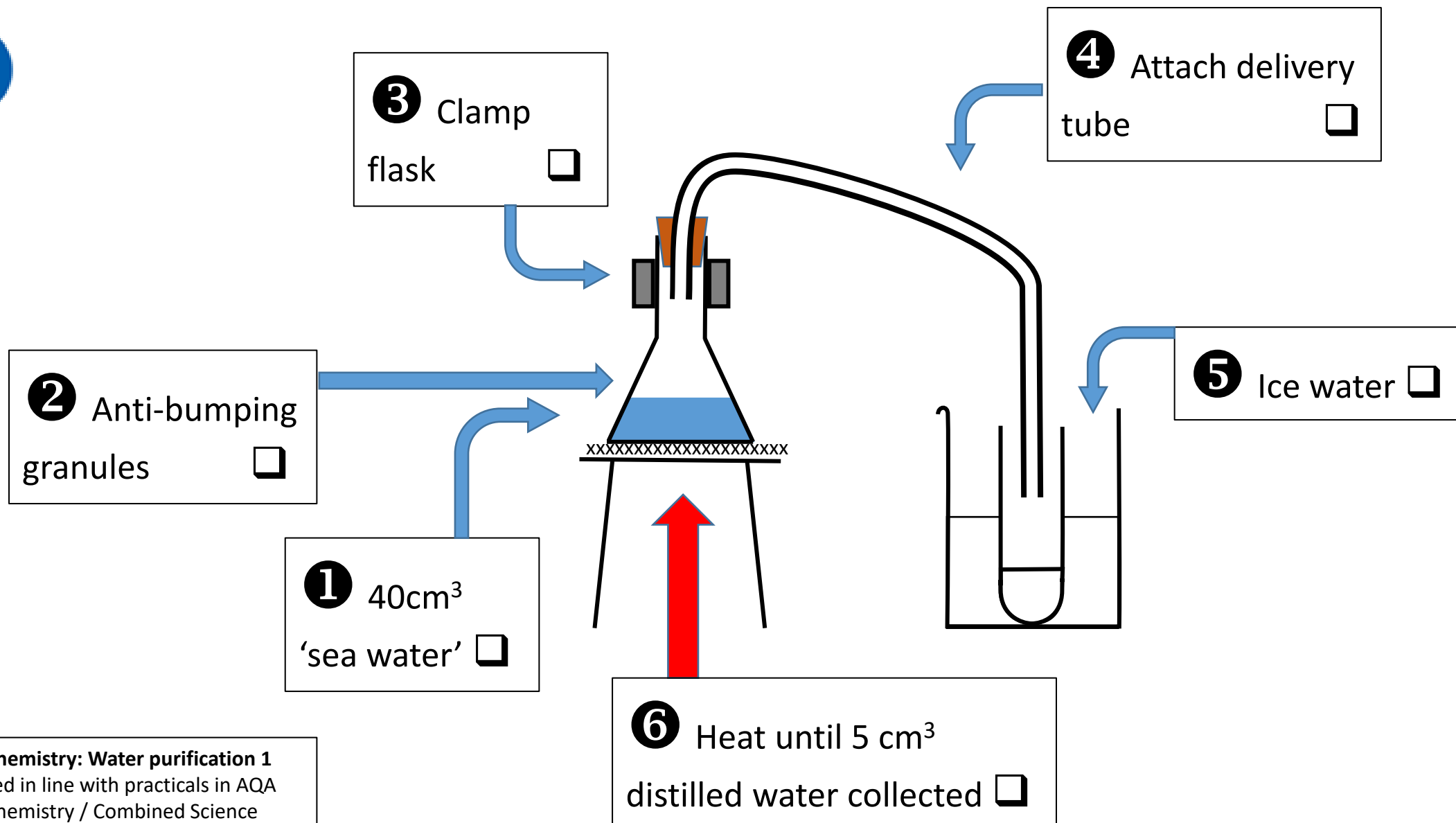
5 HALIDE TEST:
• 3 drops nitric acid
• 1 cm³ silver nitrate ☐ ☐ ☐ ☐ ☐



GCSE Chemistry: Identifying ions 2

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GCSE Chemistry: Water purification 1

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<http://www.aqa.org.uk/resources/science/gcse/teach/practicals>

1 1 cm³ water sample ☐ ☐ ☐ ☐

2 3-4 drops universal indicator ☐ ☐ ☐ ☐

3 Observe and record colour ☐ ☐ ☐ ☐



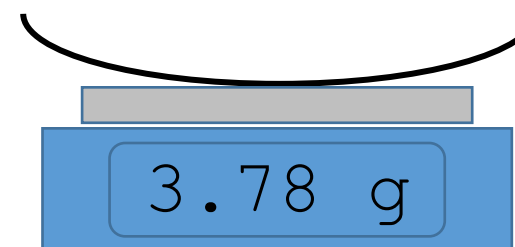
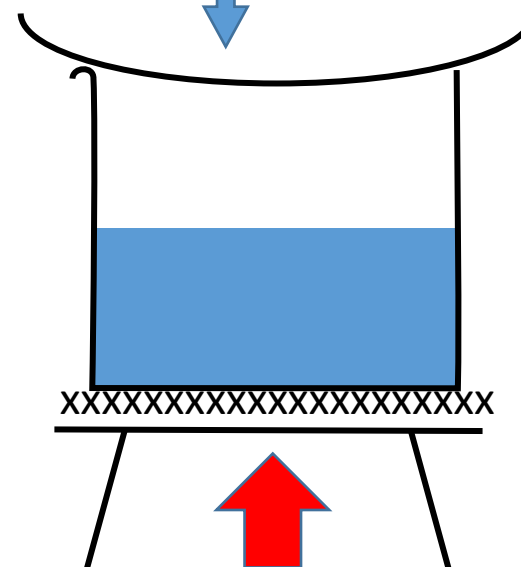
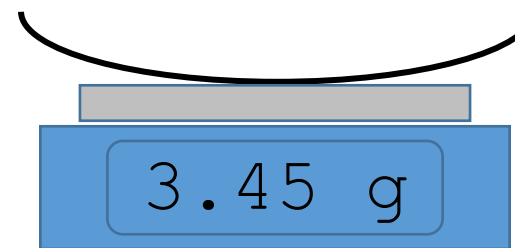
GCSE Chemistry: Water purification 2
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4 Weigh empty evaporating dish and record ☐

5 4 cm³ water sample ☐ ☐ ☐ ☐

5 Use water bath to evaporate water sample ☐ ☐ ☐ ☐

6 Remove evaporating dish (TONGS), dry base and weigh and record ☐ ☐ ☐ ☐



7 Repeat for each water sample

③ 1.8-2.0g copper oxide. Add half and swirl, **wait 1 minute**, add the other half.



XXXXXXXXXXXXXXXXXXXXXXX

